

REMARKS:

This paper is herewith filed in response to the Decision on Appeal dated January 20, 2010 for the above-captioned U.S. Patent Application. The Applicant notes that the Decision On Appeal affirms the Examiner's decision rejecting claims 3, 7, 20-22, and 25-31, as in the final Office Action mailed on January 12, 2006.

Claims 3, 7, 20, 22, 25-26, 28, and 31 have been amended. Claims 32-38 have been added. Support for the amendments can be found at least on page 11, 7-14 and page 13, line 18 to page 14, line 17 of the Application as filed. No new matter is added.

Although the Applicant does not expressly or impliedly agree with the Appeal decision or the final rejection, the Applicant submits that, in order to facilitate the prosecution of this patent application towards allowance, at least independent claim 7 have been amended for clarification of the exemplary embodiments of the invention and to further distinguish over the references cited. The Applicant notes that claim 7 now recites:

A method comprising: allocating, using a network element having an associated identifier, a temporary identity for a mobile station in a cellular network; and sending a message to the mobile station, wherein the message comprises signaling the allocated temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure and wherein the temporary identity comprises at least a part of the identifier associated with the network element used to allocate the temporary identity.

The Applicant submits that the amendments are supported at least on page 11, 7-14 and page 13, line 18 to page 14, line 17 of the Application as filed.

First, the Applicant respectfully disagrees with the comments on at least page 7 of the Decision On Appeal.

The Applicant notes that in the Appeal decision, with regards to the rejection of claims 20, 22, 25, 26, and 28, it is stated:

“To whatever extent, however, Appellant is arguing that the claim term “includes” must be interpreted as requiring a self-contained group of digits or symbols directly identifying the allocating mobile station, we find no clear support in Appellant’s disclosure for the interpretation urged by Appellant in the Briefs,” (see page 7 to 8 of the Examiner’s Answer).

The Applicant disagrees. The Applicant submits that the Appellant’s arguments, as referred to in the statement above, are clearly supported in the Applicant’s disclosure.

The Applicant directs the Examiner to at least where the Application as filed recites:

“According to the invention, the attach procedure shown in Figure 2 is modified so that in step 2-8 the ATTACH ACCEPT message comprises the inventive temporary identity (e. g. TLLI) which indicates (i. e. comprises at least part of the identifier of the SGSN that allocated the temporary identity. In the case of Fig. 2, the TLLI comprises part of the identifier of SGSN2. To put it more precisely, the attach procedure per se is not modified, but the temporary identity sent comprises at least a part of the identity of the network element that allocated the temporary identity,”(page 11, lines 7-14 of the Application as filed); and

“According to the invention, the TLLI of the mobile station indicates the network element that allocated the TLLI. In the example of Figure 3, the TLLI indicates the old SGSN1. Obviously, 3 to 5 bits are not sufficient to unambiguously indicate a large number of SGSN nodes. However, these 3 to 5 bits can be reused in a manner somewhat analogous to a frequency reuse pattern as used in the GSM system, whereby the combination of the routing area of the GPRS system and the inventive TLLI coding can unambiguously determine an SGSN node,” (page 12, lines 1-3 of the Application as filed); and

“The extended temporary identity or TLLI comprises up to three identifiers as follows: the first octet: a network element identifier unique to the paging 25 area; the second octet: a network element identifier unique to the RNC/BSC; the remaining octets: a paging identity. (NB It is only for convenience that the three identifiers are shown as 30 full octets.),” (see page 13, lines 22-30 of the Application as filed).

The Applicant submits that, as indicated above, the Applicant’s disclosure clearly does support the above indicated assertion by the Appellant, which relates to an allocated temporary identity

which also includes at least a part of an identifier indicating the network element that allocated the temporary identity.

Further, the Applicant submits that support may also be found at least in original independent claims 1, 17, 19, and 23 of the Application as filed.

Further, regarding the rejection of claim 7 in the Office Action, the Applicant notes that the Examiner states that:

“Regarding *claim* 7, Tiedemann et al discloses in column 2 lines 29-37 of a method a network element, a communication network, and a mobile station, which reads on claimed “cellular network allocating a temporary identity to at least one mobile station in a communications network, the method comprising.

- using a Mobile Switching Center (MSC, 10), which reads on claimed “network element” having an identifier of its own to allocate a Temporary Reference Number (TRN) to the at least one mobile station wherein the said TRN includes at least part of an identifier indicating the said MSC (10),” (see page 4 of the Office Action).

The Applicant notes that Tiedemann as cited discloses:

“A Temporary Reference Number (TRN) identifying the mobile switching center and the mobile station is allocated for the mobile station at the mobile switching center. The TRN can be a mobile station identification (MSID), a telephone directory number or any other number. If the TRN is not an MSID, a unique and temporary mobile identification (MSID) must also be allocated for use during the service programming procedure,” (col. 2, lines 29-37).

The Applicant notes that Tiedemann indicates that a Temporary Reference Number identifying the mobile station is allocated for the mobile station. However, the Applicant submits that, here, Tiedemann does not disclose or suggest at least where amended claim 7 recites in part “allocating, using a network element having an associated identifier, a temporary identity for a mobile station in a cellular network; and sending a message to the mobile station, wherein the message comprises signaling the allocated temporary identity to the mobile station for use by the

mobile station during at least an uplink data transfer procedure.”

Further, the Applicant notes that Tiedemann discloses:

“In response to the mobile station 2's call, the MSC 10 supplies a temporary reference number (TRN), associated with the mobile station 2 and which identifies the MSC, and routes the call to the CSC 26 via voice connection 46. The TRN can be a mobile station identification (MSID), a directory number or any other number,” and

“In the network shown in FIGS. 1 and 2, the call is routed directly to the CSC 26 via voice connection 46, although as shown in FIG. 3, the call may be forwarded, through call-forwarding, via a second voice connection 54 to a second CSC 44. In either case, the TRN serves as the initial reference for the over-the-air service programming attempt and is supplied to the CSC 26 (or 44) as part of call setup,” (col. 6, lines 29-46).

The Applicant submits that the Temporary Reference Number identifying the mobile station in Tiedemann is merely supplied by the mobile switching center to the customer service center (CSC) of Tiedemann as part of call setup. The Applicant submits that the Temporary Reference Number of Tiedemann is not sent to the mobile station.

The Applicant submits that Tiedemann does not disclose or suggest at least where claim 7 recites in part:

“allocating, using a network element having an associated identifier, a temporary identity for a mobile station in a cellular network; and sending a message to the mobile station, wherein the message comprises signaling the allocated temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure and wherein the temporary identity comprises at least a part of the identifier associated with the network element used to allocate the temporary identity”

Further, the Applicant notes that in the final Office Action with regards to the rejection of claim 7 the Examiner states:

“However, Tiedemann et al does not disclose where the said TRN includes a paging identity which is unique to each of the at least on mobile station,” and

“[Sawyer] et al discloses in column 5 lines 40-65, of a TMSI Allocation Unit (TAU, 23) used to allocate unique TMSI’s to each mobile station which also identifies the servicing area of the MSC, which reads on claimed “paging area”, as taught in column 2 lines 50-65,” and

“Therefore at the time of the invention one of ordinary skill in the art would modify the teaching of Tiedemann et al (U.S. Patent Number 6,381,454 B1) to include Sawyer et al (U.S Patent Number 5,920,814) in order to provide a method that assigns unique temporary identities that also includes the area identity for optimizing the identity of a mobile station within a service area,” (see page 5 of the Office Action).

Although the Applicant does not agree with the rejection the Applicant submits that Sawyer clearly does not overcome the shortfalls of Tiedemann, as stated above.

The Applicant notes that Sawyer as cited discloses:

“The TMSI Status Module, upon detecting a valid TMSI, fetches the VAP and the SID currently broadcast by the MSC/BS 21 from its VAP receiver 25 and its SID receiver 20, and then stores the assigned TMSI, the received VAP, and the received SID. The TMSI Status Module 26 reports to a Mobile Station Identity (MSI) Controller 27 whether the TMSI was valid. If the TMSI was valid, the MSI Controller 27 instructs a TMSI/MIN Selector 28 to utilize the TMSI for identification purposes. If the TMSI was invalid, or the currently received VAP did not match the VAP stored when the TMSI was assigned, or the currently received SID did not match the SID stored when the TMSI was assigned, the MSI Controller 27 instructs the TMSI/MIN Selector 28 to utilize the mobile station's MIN for identification purposes,” (col. 5, lines 50-65); and

“The method begins by transmitting a first Validity Area Parameter (VAP) from the first MSC, assigning by the first MSC a first TMSI to the mobile station, and utilizing the first TMSI to identify the mobile station while the mobile station operates within the service area of the first MSC,” (col. 2, lines 50-65).

The Applicant submits that Sawyer, as cited, appears to disclose operations of allocating a unique TMSI to a mobile station operating within a service area to be used by network devices to identify the mobile station. The Applicant submits that Sawyer clearly does not disclose that the

TMSI includes at least a part of the identifier associated with a network element used to allocate the temporary identity. Rather, the Applicant submits that Sawyer, as cited, merely discloses a TMSI to identify the mobile station while it operates in the service area. Further, the Applicant submits that operations related to the TMSI of Sawyer do not disclose or suggest sending a message to the mobile station, wherein the message comprises signaling the allocated temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure, as in claim 7.

In addition, the Applicant notes that Onoe relates to location registration system in mobile communication including balancing and reducing traffic density for location updating in particular zones (see Abstract and col. 1, line 60 to col. 2, line 2). The Applicant submits that Onoe does not disclose or suggest at least where claim 7 relates to allocating, using a network element having an associated identifier, a temporary identity for a mobile station in a cellular network; and sending a message to the mobile station, wherein the message comprises signaling the allocated temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure and wherein the temporary identity comprises at least a part of the identifier associated with the network element used to allocate the temporary identity. Therefore, the Applicant submits that Onoe does not overcome the shortfalls of Tiedemann and Sawyer, as stated above.

Further, the Applicant submits that none of the references cited overcome the shortfalls of Tiedemann, Sawyer, and Onoe, as stated above.

The Applicant submits that, for at least the reasons stated, none of the references cited disclose or suggest at least where claim 7 recites:

A method comprising: allocating, using a network element having an associated identifier, a temporary identity for a mobile station in a cellular network; and sending a message to the mobile station, wherein the message comprises signaling the allocated temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure and wherein the

temporary identity comprises at least a part of the identifier associated with the network element used to allocate the temporary identity.

Therefore, the Applicant submits that, for at least the reasons stated, the rejection of claim 7 should be removed and claim 7 be allowed.

In addition, the Applicant submits that, for at least the reasons already stated, none of the references cited disclose or suggest at least where independent claim 20 recites in part “at least one network element configured to allocate a temporary identity to a mobile station for use by the mobile station during at least an uplink data transfer procedure, wherein the temporary identity comprises at least a part of an identifier associated with the network element used to allocate the temporary identity.”

Further, the Applicant submits that, for at least the reasons already stated, none of the references cited disclose or suggest at least where independent claim 25 recites in part “a receiver configured to receive a message, wherein the message comprises signaling allocating a temporary identity to the mobile station, wherein the temporary identity comprises at least a part of an identifier of a network element that allocated the temporary identity.”

Additionally, the Applicant submits that, for at least the reasons already stated, none of the references cited disclose or suggest at least where independent claim 28 recites in part “the network element further configured to send a message to the mobile station, wherein the message comprises signaling allocating the temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure and wherein the temporary identity comprises at least a part of the identifier associated with the network element used to allocate the temporary identity.”

Further, the Applicant submits that, for at least the reasons already stated, none of the references cited disclose or suggest at least where independent claim 31 recites in part “A radio station controller configured to route data packets including a temporary identity allocated to a mobile

S.N.: 09/806,939
Art Unit: 2686

station in a cellular network, wherein the temporary identity was allocated for use by the mobile station during at least an uplink data transfer procedure, wherein the temporary identity comprises at least a part of an identifier associated with a network element used to allocate the temporary identity.”

In addition, the Applicant submits that, for at least the reasons already stated, none of the references cited disclose or suggest at least where independent claim 35 recites in part “receiving at the mobile station, in response to the communication, a message comprising signaling allocating a temporary identity to the mobile station for use by the mobile station during at least an uplink data transfer procedure, wherein the temporary identity comprises at least a part of an identifier associated with a network element used to allocate the temporary identity.”


Furthermore, as the claims 3 and 32-34, claims 21-22, claim 26, claim 27, claims 29-30, and claims 36-37 depend from claims 7, 20, 25, 28, 31, and 35, respectively, the references cited do not disclose or suggest these claims and these claims should be allowed.

Based on the above explanations and arguments, it is clear that the references cited do not disclose or suggest claims 3, 7, 20-22, and 25-38. The Examiner is respectfully requested to reconsider and remove the rejections and to allow all of the pending claims 3, 7, 20-22, and 25-38 as now presented for examination.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Should any unresolved issue remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted:

S.N.: 09/806,939
Art Unit: 2686



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3/17/2010

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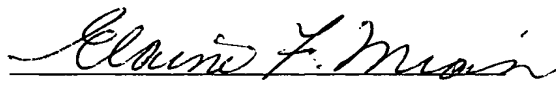
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